*Ulster Med J* 2006; **75 (3)** *178-184*

*Annual Oration*

# The Winged Chariot and the Iron Cages

Royal Victoria Hospital, Thursday 6th October 2005.

Norman PS Campbell

## INTRODUCTION

By tradition this talk, given each year at the beginning of October, has been used to welcome the new draft of medical students to the hospital. It has another function, that of allowing a senior (elderly), and in the case of this hospital, generally male, member of the medical staff, the opportunity of airing views on some topic of interest to himself if not to any one else.

Tradition also dictates that the presentation is not a lecture. It is an oration and perhaps this is as well. In July 2005, in the Guardian, David Hare mused on the word "lecture[1]". He wondered when it acquired its negative connotations. He recalled a review of one of his plays: "it was more like a lecture than a play"' - lectures may be remembered for long windedness, boredom and scolding. Perhaps the Staff of the Hospital has felt that calling it an oration provides some insurance against tedium, even promises something grander or uplifting.

You will have also noticed that the title gives little away about the topic. This should not be taken as an indication that I wished to be obscure. At the time I was asked for a title I had only a vague notion of what the content would be. Something essentially non-restrictive seemed very necessary at that time. And there is advice about suitable titles. Richard Asher in 1972, perhaps mischievously, suggested that some should be avoided.[2] "Whither medicine today?" was one such – his warning in 1972 came too late for Harold Rodgers who had given such a talk in this institution some 12 years previously.

Fig 1. *Max Weber – 1864 – 1920. The father of modern sociology.*

So, what are iron cages and winged chariots? The cages come from Max Weber, (Fig 1) often looked on as the father of modern sociology and I will say more of him later. The winged chariot is from an earlier source, a poem by Andrew Marvell (1621 – 1678) (Fig 2). Marvell lived in the troubled times of the English civil war. Initially perhaps of royalist sympathies, he later came to have some admiration for Cromwell – but this is not to imply puritanical tendencies. The poem containing the winged chariot is a witty exhortation 'To his to his Coy Mistress', encouraging her not to delay too long in resisting his attentions, for life is short and:

> *"…… at my back I always hear*
> *Time's winged chariot hurrying near*
> *And yonder all before us lye*
> *Deserts of vast eternity".*

The 'winged chariot' emphasises the rapid passage of time and part of my talk deals with some of the changes that have occurred in my lifetime in medical practice. It is for me an alarming thought that it is now 39 years since I attended my first oration as a student in 1966. Dr Richard Clarke's superb history of The Royal Hospital tells me that the orator was Dr Harry Shepherd, a noted local radiologist.[3] I know I must have been there as attendance was obligatory, but I have absolutely no recollection of what was said – perhaps a sad indication of the fate of all orators.

## THE WINGED CHARIOT

### THE NEW ROYAL VICTORIA HOSPITAL

And there have been many changes since 1966 not least the dramatic change in the appearance of the new hospital (Figs 3 and 4). Well, not completely new – during the construction:

Consultant Cardiologist, Royal Group of Hospitals Trust, Grosvenor Road, Belfast, BT12 6BA.

Correspondence to Dr Campbell

Email: Norman.Campbell@royalhospitals.n-i.nhs.uk

Fig 2. *Andrew Marvell, Politician and Poet (National Portrait Gallery)*

"Old bases in deep concrete were excavated and the material transported to Eastwood's recycling facility at Cross Hill near Crumlin. There, the materials were crushed and transported back to the RVH site for use as piling mat to provide bases for new construction work". (Suzanne Eastwood, Company Director, Eastwood Ltd., Northern Ireland. Personal Communication. Unpublished. 2005).

The 'New Royal' has grown up on foundations made from part of the old hospital.

## THE NEW LANGUAGE OF MEDICINE

Change has also affected the language we speak There has been the emergence of management speak. I remember cutting out an article in the BMJ in 1993 called "Watch your language – ensuring the robustness of targeted briefs".[4] The title itself showed where we were heading. John Hampton revealed some of the horrors of the new tongue in 2000.[5] He found the National Service Framework for Coronary Artery Disease a rich source of cliché-ridden prose. I quote extensively:

"A new vision... A government wide agenda ... An effective service for all who could benefit … Developed by focus groups … Change will need ownership of the guiding values …A shared understanding within and across agencies and stakeholders … Involvement of patients and users who can provide an unique perspective – and involvement of staff (*this apparently as an afterthought*) … Effectively targeted resources which lever change …Sharp focus on delivering improvements … Local players … Key stakeholders …Concerted action ... Measured with milestones".

Hampton's uncomplimentary comment:

"The report is a joy for managers to read but a yawn for clinicians".

## THE 1980 REITH LECTURES

More important has been the change in the attitude of sections of the public towards doctors and the profession. The 1980 Reith Lectures by Ian Kennedy - "Unmasking Medicine" - were a major marker of this change.[6] In the foreword to the book of the lectures he writes:

"My purpose is to ask some questions about the way medicine is thought of and practised".

Reading through the lectures 25 years on, they seem to have a prophetic air. Many of his questions, comments and criticisms have been acted on and have become part of standard medical practice. He emphasised the management of the whole patient versus the disease – a holistic approach. He commented on aspects of probity and ethics and professional regulation. He highlighted problems with consent. He recommended audit and he made a particular plea for the widespread adoption of evidence based medicine.

## EVIDENCE BASED MEDICINE

Let me illustrate some of the changes in the evidence base

Fig 3. *The Destruction of the Old Royal Victoria Hospital (Picture by permission of Mr Michael Ross)*

Fig 4. *The Emergence of the New Royal Victoria Hospital. (Picture by permission of Mr Michael Ross)*

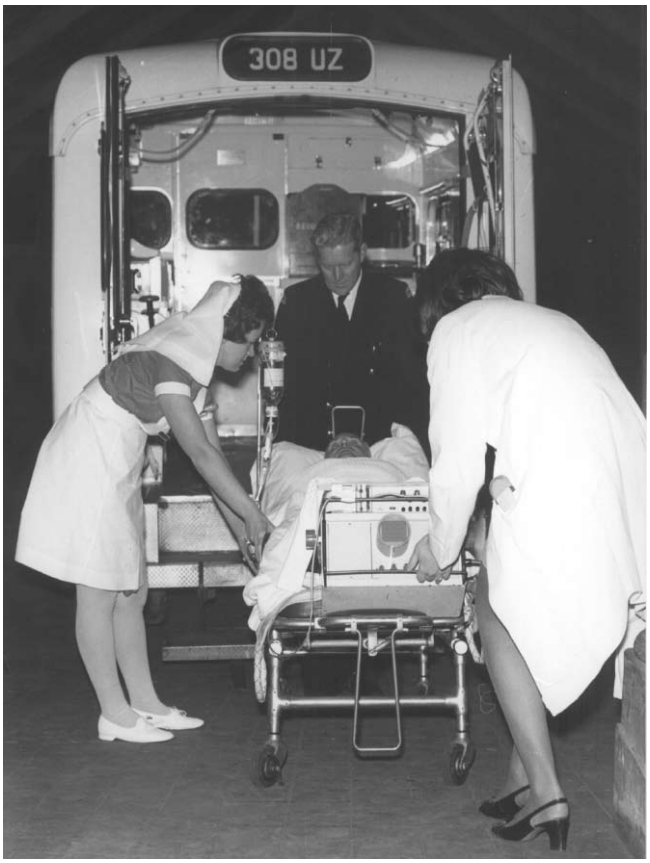


Fig 5. *Cardiology in the Royal Victoria Hospital 1970's. A patient being moved into the cardiac ambulance 1970. In fact a simulation – the 'patient' is the late Mr Alfie Mawhinney, a much respected engineer in the Cardiology Department.*

for treatment in my own speciality of cardiology. In 1968 a 24 year old man suffered his first myocardial infarction. I first met him in 1973 when he was admitted to hospital with a second infarct. He was seen early after the onset, as was fitting for a unit with a mobile coronary care unit (fig 5). He was treated with analgesia. Because his heart rate was slow he was given intravenous Atropine. He was in hospital for 18 days. At discharge he was told to "take things easy for three months". He was placed on warfarin and quinidine, the latter as an anti-arrhythmic drug. Smoking was "to be discouraged".

What was the evidence that these treatments were of benefit? – virtually none, apart from the need for early care and the advice to stop cigarettes. Some treatments – the use of anti-arrhythmic drugs – have subsequently been shown to be harmful.

Over the next 30 years he has received large number of drugs and has undergone a number of procedures, culminating in heart transplantation earlier this year (Table I). All these therapies were prescribed with confidence largely on the basis of the results of properly conducted randomised controlled trials[7] The number of such trials, often involving very large numbers of patients, has increased greatly and rightly so - they are a formidable advance in the rational treatment for our patients - but there are some important issues about the way in which they may affect our practice.

Table I

*Evidence Based Interventions and Medications received by the patient described in the text.*

| INTERVENTIONS | MEDICATIONS |
|---|---|
| CABG (coronary artery by-pass surgery)<br>AICD (automatic implantable cardiac defibrillator)<br>Bi-ventricular pacemaker<br>Cardiac Transplant | Aspirin<br>ACE inhibitor<br>Beta-Blocker<br>Anti-platelet agent<br>Statin<br>Spironalactone |

Let me illustrate using the results of the ISIS 2 study - published in 1988 it assessed the effects of aspirin (ASA) and the thrombolytic drug streptokinase (STK) when given soon after presentation with acute myocardial infarction.[8] The study was a massive, controlled, randomised trial involving more than 17,000 patients - see Table II. The patients in Group I received a placebo, those in Group II ASA but no STK. Group III received STK but no ASA. Group IV received STK and ASA. Table II shows the highly significant reduction in death after 35 days in the group receiving combined STK and ASA compared to those receiving placebo. The effects of ASA or STK alone were intermediate.

The relative reduction in death with the combined drugs compared with placebo was 42% (13.2 % to 8%) and 24% (10.7%-8%) when compared with ASA alone. These relative gains are impressive but the absolute benefit less so. Thus, 100 patients need to be treated with combined STK and ASA to prevent 2-3 deaths compared with ASA alone. The study shows a highly statistically significant benefit of treatment but the overall gain to an individual patient is small and is accompanied by a small risk of cerebral haemorrhage in all active treatment groups.

Table II:

*Summary Results of the ISIS 2 Study,[8] (17,187 patients with acute myocardial infarction).*

| | **Placebo** | **ASA** | **STK** | **STK +ASA** |
|---|---|---|---|---|
| **Death at 35 days** | 568 | 461 | 448 | 343 |
| Total pts | 4300 | 4295 | 4300 | 4292 |
| % | 13.2 | 10.7 | 10.4 | 8 |
| **Reduction in deaths** | | | | |
| Relative | 42% | 24% | | |
| p value | <0.00001 | <0.001 | | |
| Absolute per 100 Patients | 5.2 | 2.7 | | |
| **Complications** | | | | |
| Brain Haemmorrhage | 0 | 5 | 7 | 5 |

ASA = aspirin; STK = streptokinase. The relative reduction in deaths at 35 days after infarction of 42% and 24% and accompanying p values compare respectively combined STK and ASA with Placebo and ASA.

## CAVEATS ABOUT RCT'S

In the year 2000 a poignant article was published in the Journal of the Royal College of Physicians[9] and I quote:

"Last week my friend James was admitted to hospital with a myocardial infarction …He was given a thrombolytic drug ... A CT scan confirmed a massive cerebral haemorrhage and he died a few hours later as a result of this".

"The drugs reduce the relative mortality by 20% but the absolute mortality by only 2%". What patient would consent to an operation with only a 1 in 50 chance of it benefiting him?"

"The irony is that the double blind randomised placebo controlled trial, that knight in armour, has been used to provide the statistical significance that justifies it all".

"The sad result of this modern doctrine ... old ladies, frail, demented and incontinent will come in with their list of medications – ACE inhibitor, statin, warfarin, excellent examples of best practice, evidence based and outcome validated ….Then there is James with all eternity to take comfort from the fact that his door to needle time was well within national guidelines."

All clinical trials suffer from the drawback that the results are derived from data obtained from a group. The clinician does not prescribe for a group but for one person and must individualise the treatment.

This is not a new concept. Henry De Mondeville round the year 1300 stated:

"Anyone who believes that the same thing can be suited to everyone is a great fool, since medicine is practiced not on mankind in general but on every individual in particular"[10]

In the case of patients with acute myocardial infarction the major benefits of thrombolytic therapy are seen in those who are at risk of major cardiac damage – this can be deduced by features such as anterior location, extensive ST segment elevation, haemodynamic compromise. The risk of bleeding complications (including cerebral haemorrhage), is highest in the elderly especially if female, with the use of certain thrombolytic agents (tissue plasminogen activator – t-PA), large doses of heparin and where there is a potential source of bleeding. The correct choice of treatment must be based on a reasonable assessment of the interplay of these various factors, rather than simply administering the drug without further thought.

There are other pitfalls in the application of the results of large clinical trials to the general population.[10,11] Randomised trials generally deal with a well-defined highly selected group of patients who may be picked, in part at least, on the basis that they are likely to respond and that they may be compliant in taking medications. The patients may be at a lower risk than the general run of patients admitted to hospitals - they tend to have a relative lack of co-morbidities. The patients in the trial may well not be truly representative of those seen in normal practice. The trials themselves tend towards short to medium term follow-up – perhaps 3 - 5 years – rather than being truly long-term.

These comments are not to take away from the fundamental importance of the RCT. The widespread adoption of the results has been one of the most important advances in medicine over recent decades. The data from these studies have moved us from the era of folk medicine and provide the firm bed-rock for our current therapies. But they have their drawbacks which must be recognised.

Fig 6. *Professor Frank Pantridge 1970's, holding one of the first light weight portable defibrillators*

## THE VALUE OF OBSERVATIONAL DATA

The major thrust for the rational use of therapy has come from the results of clinical trials. But information for practice also comes from other valuable sources. I would like to make a slight digression to mention my former chief, Professor Frank Pantridge, who died[12] on Boxing Day 2004. (Fig 6) As many of you will know Professor Pantridge made a massive contribution to the management of the acute heart attack. The two major principles of his approach were that early care, started as soon as possible after the onset of symptoms, improved prognosis, and that patients with ventricular fibrillation should have the heart rhythm disturbance corrected as soon as possible by de-fibrillation. These two aims could be realised by the introduction of mobile coronary care (taking the hospital to the patient) and the widespread availability and use of lightweight portable defibrillators.

These treatments were not developed from controlled trials but from careful observation of patients in their illnesses. Observational studies of this type, including meticulous collection of clinical data from series of patients (and this may include large multi-national registries) combined with careful follow-up remain important in the development and assessment of new therapies.

And it is important not to forget the humble case report, a greatly under-rated part of the medical literature. Reports of how difficult or unusual conditions were diagnosed and managed may be invaluable in the approach to a difficult clinical problem. I still find these reports the most interesting parts of the medical literature as well as giving help in the management of an unusual problem. In this hospital the weekly case presentations at the Physicians' Meeting remain as important a part of the educational life of the hospital as they did 40 years ago.

## THE MEDICALISATION OF LIFE

In the mid 1970's Ivan Illich published his controversial book 'Medical Nemesis' in which he described medicine as sick, perhaps a fore-runner of Ian Kennedy. In it he described the encroachment of medicine into the apparently healthy population. Traditionally the prime job of the physician is the care of the sick rather than the expropriation of the healthy - the taking on "the whole world as a hospital ward". Petr

Skrabanek[13] in his often hilarious book has described the development of 'anticipatory medicine' with regular check ups and screening of healthy people. Using official guidelines he calculates that a 'low risk healthy woman between the ages of 20 and 70 should visit her doctor annually, have 278 examinations, tests and counselling sessions'.

Skrabanek mocks attitudes to health promotion, quoting the graffito:

"I don't smoke nor drink. I don't stay out late and don't sleep with girls. My diet is healthy and I take regular exercise. All this is going to change when I get out of prison."

In cardiology the anticipatory or preventive approaches are especially well developed. Westin and Heath[14] discussed results from the Nord Tröndberg health study. If levels of blood pressure of 140/90 and cholesterol of 5.0mmol/l are taken as targets at which treatment may be started, then, by the age of 50, 90% of the population will need their cholesterol lowered and 45% will require blood pressure regulation. The authors emphasised the cost of this in terms of expense, worry for the patient & the potential for long-term side effects.

## THE IRON CAGES

### THE 2002 REITH LECTURES

In 2002 Onora O'Neill delivered the Reith Lectures – her topic "A Question of Trust".[15] Whereas the 1980 lectures could be considered an attack on the profession, the 2002 lectures were, at least in part, a defence of professional values. The change in tone perhaps reflects an appreciation that in the 22 years between the two lectures something valuable was in process of being lost. I will be quoting from parts of her important lectures during this section.

### UNHAPPY DOCTORS

In 2001 Richard Smith wrote an editorial for the British Medical Journal titled: "Why are doctors so unhappy? [16] The article was interesting in itself but perhaps most striking was the reaction of the readership - 75 letters were subsequently published in the BMJ in response to it. The correspondents identified a number of reasons for the unhappiness and many can be included within the three P's – politicians, patients and the press. Perhaps surprisingly, the fourth P, pay, did not feature highly.

### POLITICIANS

The constant state of upheaval and the changes in the way the health service is run were cited as major problems. One correspondent described:

"a constant state of management reorganisation (upheaval). My own service is part of three separate re-organisations".

Raymond Tallis[17] in his wonderful book 'Hippocratic Oaths' has accused politicians of change for change's sake with perversion of the old adage:

"If it is not necessary to change it is necessary not to change."

To:

"Even if it is not necessary to change it is necessary to change".

The reason for this state of 'Continuous Revolution' may lie in the rapid change of leadership of the health service. From 1979 to 2005 there have been 11 different Secretaries of State the majority staying in post for no more than 2-3 years. For many the job represented the pinnacle of their political career.

There is a major contrast between changes introduced into medical practice and those wrought by politicians – the former are now largely evidence based whereas political innovations, including the changes in the way the health service is run, are opinion based and often inadequately researched beforehand.

Politicians can also be accused of raising patients' expectations – examples include the Patients' Charter and the targets that are now being set which in themselves produce distortions in the way health care is provided. Raymond Tallis[17] has described the phenomenon of "the lump in the carpet". Money may be found to reduce one particular waiting list – that lump in the carpet is flattened but another emerges elsewhere. Waiting lists can be reduced dramatically in the short term, but the gain is illusory if there is no long-term additional money for the impetus to be maintained.

### PRESS

The press have generally been treated with some suspicion by the profession. While everybody is aware of top-class journalism dealing with medical matters, we have all noticed the misrepresentations. The words "breakthrough" and "wonder drug" appear far too often, never to be heard of again and shock horror stories abound. Particularly difficult for members of the profession to bear is the hounding that occurs – the naming, the shaming, the blaming - and when ultimately it is shown that there has been no justification for these abuses the lack of an appropriate apology. I quote from Onora O'Neill:[14]

"The media, in particular the print media, while deeply pre-occupied with others' untrustworthiness have escaped demands for accountability".

### PATIENTS

The letter writers to the BMJ seemed to have a general perception that patients and their relatives have in some ways become more difficult to deal with. There has been a rise in expectations about what can be delivered. Part of this increase in expectation may have arisen from what is read in the papers, seen on television or extracted from the internet. Part may arise from what politicians say.

### THE JOB OF A HOSPITAL CONSULTANT

Though these problems are clearly important in shaping the unhappiness of doctors they are not the whole story. In Table III I have summarised some aspects of the work of a hospital doctor. There is the basic job – on occasion fascinating, at times difficult and demanding, sometimes with moments of near terror.

Then there are what I have called the 'Old Faithfuls' – the features that have coloured my working life for many years – the bed shortages, the demands for shorter hospital stays, the threat of complaints and medico-legal action, efficiency savings (cuts), the usual organisational hiccups – missing

TABLE III

*The Jobs of a Hospital Consultant*

| THE BASIC JOB | |
|---|---|
| OLD FAITHFULS | NEW THINGS |
| Bed shortages/reductions with Shorter hospital stay<br>Complaints/Medico-legal<br>Efficiency Savings (cuts)<br>Increasing Demand<br>Medical Advances<br>Organisational<br>*Charts, results* | Appraisal/Accountability<br>Audit<br>CPD<br>E-mails<br>Governance<br>Junior Doctors Hours<br>Management<br>*more meetings*<br>Obligatory Training<br>Targets /Bench-marking |

charts, results not coming back, key staff on leave or sick with no replacement.

On top of these come 'New Things' - I have listed them in alphabetical order rather than necessarily in order of inconvenience. All are important to a degree including the obligatory fire lectures, CPR training, avoiding back injury sessions. All make in-roads on our time. The extra hours for preparation and attendance at audit and management related meetings have to be taken out of clinical time and the work caught up with some other time. All these activities take place against a background of new targets and benchmarking.

One of the responses to Richard Smith's editorial in the BMJ came from Declan Fox, locum family physician, Prince Edward Island:

"We have seen this over and over …… none of it works. It does not work because each new thing brings with it increasing bureaucracy".

## THE IRON CAGE AND BUREAUCRATIC CONTROLS

It is this increasing bureaucracy which is the Iron Cage of the title. Max Weber[18] (Fig 1) is not widely read in this province though one might have supposed that his major work – 'The Protestant Ethic and the Spirit of Capitalism (1905)'- might have some appeal here. He was much occupied with the concept of bureaucracy. He believed it an efficient way of running an organisation but to have inherent dangers. Some of his remarks are noted in table IV.

TABLE IV

*Max Weber on bureaucracy.*

"The principles of office hierarchy and of levels of graded authority mean a firmly ordered system of ...subordination in which there is a supervision of the lower offices by the higher ones"

"The passion for bureaucratization drives us to despair

"Not summer's bloom lies ahead of us, but rather a polar night of icy darkness and hardness, no matter which group may triumph externally now"

"A bureaucratically organised social order, "an IRON CAGE" in which people are trapped"

## MANAGERS ARE NOT THE ENEMY

It is important to appreciate that my comments are not intended as an attack on managers or administrators – we as doctors could not survive in the current climate without managers to help us through the administrative jungle. I have had the pleasure of working with a number of managers over the last 10 years and without their help and dedication life would have been even more difficult. But I am criticising the continuous changes that have been inflicted on the service, the bureaucracy which seems ever expanding and the increasingly widely applied mechanisms of control.

Onora O'Neill spoke of these controls and saw them as a danger, a barrier to carrying out professional duties (table V). Raymond Tallis developed the theme a little further, and feared[17]:

"The de-professionalising of medicine – loss of its direction in thickets of regulation born of bureaucratic distrust".

The problems do not only apply to our profession but also to others including teachers and other public servants. I think we can take some comfort that the issue of excessive controls and the adverse effect they may have on the way we perform our duties has been recognised outside our own areas of work. We would I think all recognise that the controls increase the difficulties we already have in carrying out our job.

TABLE V

Onora O'Neill on aspects of the new bureaucracy[15]

"We are imposing ever more stringent forms of control. We are requiring those in the public sector and the professions to account in excessive and sometimes irrelevant detail to regulators and inspectors, auditors and examiners. The very demands of accountability often make it harder for them to serve the public sector"

"Doctors speak of the inroads….into the time they can spend into finding out what is wrong with their patients"

"…complaints procedures are so burdensome that avoiding complaints, including ill founded complaints, becomes a central goal in its own right"

"The new accountability is widely experienced not just as changing but distorting the proper aims of professional practice"

Weber 100 years ago was even gloomier - "Not summer's bloom lies ahead of us but rather a polar night of icy darkness and hardness". He also asked the question:

"How can we oppose this machinery, in order to keep a portion of mankind free from this parcelling out of the soul?"

## THE NEW CONSULTANT CONTRACT – THE ANSWER TO THE MAIDEN'S PRAYER?

Perhaps some of us thought that the new consultant contract would go some way towards helping our problems. After all,

 

the contract had within it the concept that work done would be recognised. Work not done would not be rewarded. There would be some increase in salary and there would be time for additional activities – audit, teaching, appraisal etc. There was also the opportunity to reduce hours.

From the beginning, however, it was clear that there were differing perspectives. The consultants felt they were working too hard – 50 to 60 hours per week including on-call. There was less and less time for family and leisure. The contract gave a chance for a reprieve. The view of government was rather different – the impression appeared to be that consultants were idle, inefficient and resistant to change. There was the mention of private patients and the golf course. A figure of "No more than ten programmed activities" was suggested. We then went into the diary exercise – a daily log of our activities – which showed in the main that consultants were working considerably in excess of the ten sessions.

The outcome of the negotiations has been unsatisfactory. Prospective cover has not been built into the new plans, nor has there been adequate recognition of "external work". The response from the Department of Health seemed to imply that they were dealing with "greedy doctors". The solution was no reduction in work but increased efficiency with no clear indication how this was to be achieved. Within the province the withdrawal of the contingency fund set aside to provide extra jobs has been a major blow. There has also been withdrawal of time for supporting activities. The prospect is one of more controls, more targets and more discontent.

And this discontent is not a trivial matter. In September 2005 Jeffcoate discussed "Care and despair in the UK National Health Service".[19] He cited an article by Taylor *et al* which appeared in the same edition[20]. The article showed that psychiatric morbidity and emotional exhaustion in consultants from five specialities had risen over an eight year period from 1994 to 2002. The change in well being was attributed to increased job stress without a comparable increase in job satisfaction. Jeffcoate identified the conflict between imposed change and the ability to perform clinical duties, and asked the question as to whether these changes might 'pose a threat to the health and well being of consultant medical staff and of their patients.'

## CLOSING REMARKS

I do not wish to end this talk on a negative note. I have tried to emphasise the dramatic improvement in the information and evidence base for practising medicine in the western world. This has grown up largely from well conceived, randomised clinical trials. To this has been added important observational information, so that, though medicine still remains a complex profession, we now have treatments whose effectiveness is known rather than guessed at.

There is I believe a legitimate concern about increasing bureaucracy. I take some heart from my tale of two Reith Lectures. The first, largely uncomplimentary to the profession, gave an indication for the way ahead – and the profession has responded to this. The second, showed a sympathetic appreciation of the problems affecting both our own and other professions. There is increasing recognition of the dangers of dropping morale and of the need for increased resources. In terms of the new contract it is important that the principle remains one of negotiation rather than *dictat.*

I am also encouraged by what appears to me to be the greater teamwork within the health service. I believe there are now much closer relationships between different health professions and different disciplines within the service. I am greatly comforted by the high quality of new doctors coming into the profession. I know that they, including those listening to me today, will continue to uphold the best traditions of the profession in the future.

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